

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
MISSISSIPPI DRAINAGE					
Allegheny:	<i>Feet</i>			<i>Feet</i>	
Lock No. 5, Freeport, Pa.	24	18	18	24.5	Nov. 18.
Lock No. 4, Natrona, Pa.	24	29	29	24.2	Nov. 29.
MISSISSIPPI DRAINAGE					
Tuscarawas: Gnadenbitten, Ohio.	9	29		10.4	Nov. 30.
Wabash: Lafayette, Ind.	11	30		15.3	Do.
Tippecanoe: Norway, Ind.	6	15	15	6.0	Nov. 15.
		25	26	6.0	Nov. 25-26.
		29	(²)	6.5	Nov. 29.
ILLINOIS:					
Morris, Ill.	13	29	(²)	14.5	Nov. 30.
Peru, Ill.	14	18	23	14.2	Nov. 19.
		29	(²)	17.7	Nov. 30.
Henry, Ill.	10	30	(²)	10.4	Do.
Peoria, Ill.	16	29	(²)		
MERAMEC:					
Pacific, Mo.	11	9	11	13.9	Nov. 10.
Valley Park, Mo.	14	9	9	14.0	Nov. 9.
Bourbeuse: Union, Mo.	12	10	10	12.9	Nov. 10.
Black: Corning, Ark.	11	17	24	11.8	Nov. 19-21.
PACIFIC DRAINAGE					
Columbia: Vancouver, Wash.	15	26	(²)	16.3	Nov. 20.
Willamette:					
Oregon City, Oreg.	12	27	27	12.0	Nov. 27.
Portland, Oreg.	15	26	(²)	17.5	Nov. 29.
Santiam: Jefferson, Oreg.	10	25	26	15.0	Nov. 25.
		28	29	13.0	Nov. 29.

¹ Estimated.² Continued into December.

MEAN LAKE LEVELS DURING NOVEMBER, 1927

By UNITED STATES LAKE SURVEY

[Detroit, Mich., December 3, 1927]

The following data are reported in the Notice to Mariners of the above date:

Data	Lakes ¹			
	Superior	Michigan and Huron	Erie	Ontario
Mean level during November, 1927:				
Above mean sea level at New York.	<i>Feet</i> 602.54	<i>Feet</i> 578.91	<i>Feet</i> 571.11	<i>Feet</i> 244.85
Above or below—				
Mean stage of October, 1927.	-0.19	-0.19	-0.21	-0.14
Mean stage of November, 1926.	+0.85	+0.65	-0.36	-0.39
Average stage for November, last 10 years.	+0.48	-0.68	-0.53	-0.44
Highest recorded November stage.	-0.97	-4.01	-2.58	-2.97
Lowest recorded November stage.	+1.48	+1.23	+0.66	+1.44
Average departure (since 1860) of the November level from the October level.	-0.16	-0.26	-0.26	-0.24

¹ Lake St. Clair's level: In November, 1927, 573.78 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, NOVEMBER, 1927

By J. B. KINCHER

General summary.—Except in the flooded areas of the Northeast and in some other sections where moisture was needed, the first part of the month was generally favorable and farm work made satisfactory advance. It was still too dry in the Southeast and quite generally in the western portions of the Great Plains, including much of Texas and adjoining sections. In the Ohio, middle Mississippi, and lower Missouri Valleys the first general killing frost and freezing weather of the season occurred on November 6, considerably later than the average. Droughty conditions continued in the Southeast until the latter part of the second decade, when rainfall over southern sections, especially from eastern

Texas and Arkansas eastward, was very beneficial in conditioning the soil and for winter grain crops. There was some damage to tender vegetation by frost in the northern portions of the Gulf States, but harm was not extensive, as crops had mostly matured.

Outside operations were retarded by heavy rains in the Northeast and work was practically at a standstill in the Central-Northern States between the Lake region and the Rocky Mountains because of cold and snow. During the last decade frequent rains or muddy fields were unfavorable for outdoor work in the upper Mississippi Valley and from the Ohio River northward and northeastward. The mildness and abundant moisture, however, caused rapid growth of winter crops and generally good condition was noted. Moisture was still needed in the Southeast, rather badly in places, while in the Southwest, including the western Great Plains, the drought was unrelieved with precipitation badly needed.

Small grains.—During the first decade light to moderate precipitation benefited winter wheat over much of the interior valleys and continued satisfactory progress was reported. It was still too droughty, however, in the extreme western portion of the belt and in much of the Southwest, particularly western Kansas and some adjoining sections. During the second decade light to moderate rainfall was beneficial for winter wheat in Oklahoma, but, in general, moisture was still needed and the crop made mostly poor progress in the Southwest. In other portions conditions were generally favorable and wheat made satisfactory advance, but in the Southeast the soil continued too dry for winter grains. Growth of winter wheat was checked in the interior valleys by cool weather the latter part of the decade.

The mild, moist conditions which prevailed quite generally throughout Central and Northern States from the eastern Great Plains eastward during the last decade made splendid growing conditions for wheat and other fall crops and satisfactory advance was reported. It was still too dry, however, in western portions of the Great Plains, particularly in western Kansas and some adjoining districts, and poor progress was made.

Corn.—Weather conditions during the first decade were generally favorable for drying out the corn crop and husking made good progress in the upper Ohio Valley, in Missouri, and quite generally in the Great Plains States, while considerable was accomplished in other portions of the belt. Husking was delayed by rains during the second decade in much of the Mississippi Valley, but in western portions of the Corn Belt and in the area from the upper Ohio Valley eastward good progress was made in this work.

During the last decade in the more eastern States from Pennsylvania and West Virginia northward, and also in the area lying north of the Ohio River, as well as in much of the upper Mississippi Valley, frequent showers or thawing weather made corn fields too soft for operations and husking made slow progress. Elsewhere good advance was reported under favorable weather conditions, especially in the Great Plains and Southwest, where the weather was unusually favorable.

Cotton.—Very favorable conditions for picking and ginning cotton continued throughout most of the first decade. Practically all upland cotton had been harvested in Tennessee, while in Arkansas killing frost stopped growth but caused bolls to open rapidly. Good progress was reported in Oklahoma, and ideal weather in Texas was very favorable for gathering the cotton remaining in the fields. During the second decade frequent rains interrupted pick-